Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

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In the Matter of	
Redesignation of the 17.7-19.7 GHz Frequency Band, Blanket Licensing of Satellite Earth Stations in the 17.7-20.2 GHz and 27.5-30.0 GHz Frequency Bands, and the Allocation of Additional Spectrum in the 17.3-17.8 GHz and 24.75-25.25 GHz Frequency Bands for Broadcast Satellite- Service Use)) IB Docket No. 98-172) RM-9005) RM-9118))

To: The Commission

REPLY COMMENTS OF THE ASSOCIATION OF AMERICAN RAILROADS

The Association of American Railroads ("AAR"), by its undersigned counsel, pursuant to Section 1.415 of the rules of the Federal Communications Commission ("Commission")^{1/} and the <u>Order</u> released November 2, 1998,^{2/} hereby submits its Reply Comments to the above captioned <u>Notice of Proposed Rule Making</u>^{3/} concerning the redesignation of the 18 GHz band.

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^{1/} See 47 C.F.R. § 1.415.

Order, DA 98-2231, (released November 2, 1998) (Granting a "Motion for Extension of Pleading Cycle" in this proceeding. Due dates for filing comments and reply comments extended to November 19, 1998, and December 21, 1998, respectively.)

^{3/} IB Docket No. 98-172, *Notice of Proposed Rule Making*, (FCC 98-235),(released September 18, 1998)("*Notice*").

I. Background and Preliminary Statement

In its original comments in this proceeding AAR concurred with the Commission's baseline determination that sharing between the Fixed Services ("FS") and ubiquitously deployed satellite earth stations is impracticable. AAR urged the Commission to adopt a specific band plan as well as general policies that affirm the need for continued vibrant and sustainable FS access to the band. AAR endorsed the alternative band redesignation proposal submitted by the Telecommunications Industry Association⁴ and endorsed by the Fixed Wireless Communications Coalition ("FWCC").⁵

A review of the record in this proceeding reveals an almost unanimous consensus in support of some form of redesignation of the 18 GHz band. Nearly all commenters agree that the FS and satellite allocations in the 18 GHz band must be separated. However, AAR is concerned that some satellite interests propose to effect this separation in a way that would grossly prejudice both existing FS operations as well as future FS access to the band. Accordingly, AAR hereby reiterates its support for the TIA band allocation proposal, and urges the Commission to affirm its longstanding policies requiring full reimbursement for any costs associated with incumbent system relocation. AAR also hereby expresses its support for and endorsement of the Reply Comments of the FWCC that are being filed in this proceeding under separate cover.

^{4/} See Comments of the Fixed Point-to-Point Communications Section, Wireless Communications Division of the Telecommunications Industry Association.

^{5/} See Comments of the Fixed Wireless Communications Coalition. (AAR is a supporting member organization of the FWCC and contributed substantively to those comments.)

II. The TIA Band Redesignation Proposal is Fair and Equitable

While the comments reveal widespread support for the Commission's determination to separate the FS and FSS allocations in the band, the majority of commenters disputed the size of the specific service allocations. Most notably, several GSO/FSS commenters express a need for 1000 MHZ of "clean spectrum" in the band.^{6/}

In distinct contrast to the widespread FSS requests for additional spectrum are the Comments of TIA which actually propose to give up 250 MHZ of primary spectrum allocation at 18.58-18.82 GHz. In exchange for releasing its claim to this 250 MHZ allocation, the TIA requests that the remaining FS allocation in the band -- 17.7-18.14 GHz; paired with 19.26-19.7 GHz -- be protected from any further encroachment by satellite operations (BSS, GSO/FSS, or NGSO/FSS), and rechannelized to permit both narrow and broadband system deployment. AAR believes that this proposal offers an equitable resolution of the competing interests in the band, and urges its adoption by the Commission.

^{6/} See e.g., Comments of Lockheed Martin, Hughes, PanAmSat, GE American Communications, TRW, and KaStar.

If FWCC Comments at 14. (The FWCC notes that this allocation is of limited utility because its paired allocation at 18.92-19.16 GHz is reduced to secondary status under the Commission's proposal.)

^{8/} Id at 15. (This rechannelization will permit systems currently deployed at 18.55-18.8; 18.92-19.16 GHz to migrate to 17.7-18.14; 19.26-19.7 GHz.)

^{9/} A detailed analysis of the various proposed band plans is included in the Reply Comments filed by the FWCC. AAR is a contributing member organization of the FWCC and hereby incorporates those Reply Comments by reference.

III. A Successful Redesignation of the 18 GHz Band Must Include Grandfathered Interference Protection for Incumbents and Equitable Relocation Reimbursement Rules.

An equitable redesignation of the 18 GHz band is the stated objective of this proceeding. However, unless incumbent FS system operators are adequately protected during the transition to their newly allocated frequency assignments the entire proceeding will be jeopardized. To be successful, the final band redesignation proposal must include adequate protection for "grandfathered" incumbent system operators, and any satellite interest that wishes to relocate an incumbent FS system must be subject to the Commission's longstanding rules regarding relocation cost reimbursement.

A. Proposals from the GSO/FSS NGSO/FSS to Limit the Grandfathering Rights of Incumbent FS Must be Rejected.

In the *Notice* in this proceeding, the Commission recognized that existing infrastructure in the 18 GHz band represents a significant investment that should not be sacrificed in favor of the band redesignation. Accordingly, the *Notice* provides for the grandfathering of incumbent FS systems "to protect the existing investment in terrestrial fixed service operations." However, a number of satellite interests have filed comments requesting that the grandfathering protection afforded incumbent licensees either be limited or eliminated. From AAR's perspective, any abrogation of the grandfathering rights of incumbent FS systems operators would not only be grossly

^{10/} Notice at 40.

^{11/} See Comments of Lockheed Martin at 13, Comments of Loral at 7, Comments of PanAmSat at 5, Comments of GE American Communications at 7, Comments of Pegasus Development Corporation at 7, Comments of DirecTV at 10.

inequitable, but also would introduce a level of uncertainty into this proceeding that, in the case of the railroad industry, would present an intolerable safety risk.

As described in AAR's original Comments in this proceeding, railroad operators rely on FS links to interconnect trackside fixed and mobile radio facilities with centralized dispatch centers to ensure safe operation of the rail system. This communications network is a vital component in all of the railroad's safety mechanisms. Consequently, the integrity of these systems is paramount to the safe operation of the railroads. If the Commission were now to jeopardize the ability of these systems to remain free from harmful interference or regulatory challenge from later entrant satellite operators, the integrity of these systems would be degraded and the underlying railroad operations they support would be put at risk.

Additionally, because it is impossible to predict when the GSO/FSS and NGSO/FSS systems will be deployed, and when and where their ubiquitous earth stations will be sited, it will be impossible for a railroad operator -- or any other FS incumbent -- to accurately predict when its FS system may be subject to interference and/or challenge from a satellite operator. In order to ensure a smooth and safe transition during the band redesignation, the Commission must ensure that incumbent FS systems are adequately protected from interference or interruption from later entrant satellite systems. This can be accomplished by adopting the grandfathering proposal offered in the Commission's *Notice*.

B. Any Relocation of Incumbent FS Systems Must be Governed by the Commission's Existing Rules as Adopted for the 2 GHz Band.

A number of satellite interests commenting in this proceeding acknowledge that the they may have difficulty deploying large numbers of earth stations in areas where incumbent FS systems are deployed. And although a number of these commenters suggest that relocation of incumbent FS systems presents a solution to incompatibility issues, few acknowledge the need to reimburse incumbents for any potential relocation expenses. The one satellite interest that specifically addresses relocation reimbursement for incumbents, Teledesic, proposes a reimbursement scheme that is so limited as to be essentially without value. It is so the satellite interest that specifically addresses are impursement scheme that is so limited as to be essentially without value.

The Commission has long recognized that when incumbent licensees are relocated from their existing spectrum assignments in order to accommodate new systems, the later entrant must reimburse the incumbent operator for its relocation expenses. These relocation expenses "include all engineering, equipment, site and FCC fees, as well as any reasonable, additional costs that the relocated fixed microwave licensee may incur as a result of operation in a different fixed microwave

^{12/} See Loral Comments at 6 ("The Commission must relocate existing terrestrial licensees . . . in bands that are designated for primary GSO/FSS use.); KaStar Comments at 7; PanAmSat Comments at 5-6.

^{13/} See Teledesic Comments at 17-20.

^{14/} See, Redevelopment of Spectrum to Encourage Innovation in the Use of New Telecommunications Technologies, First Report and Order and Third Notice of Proposed Rule Making, 7 FCC Rcd 6886, 6890 (1992), Second Report and Order, 8 FCC Rcd 6495 (1993); Third Report and Order and Memorandum Opinion and Order, 8 FCC Rcd 6589 (1993) ("Emerging Technologies Proceeding").

band."^{15/} In fact, this policy has been affirmed as recently as a month ago when the Commission denied a Petition, filed by a coalition of Mobile Satellite Service ("MSS") providers, requesting exemption from the relocation compensation policies adopted in the *Emerging Technologies* proceeding.^{16/}

In denying the petition the Commission reasoned: "Were we to accept the MSS Coalition's position that international satellite-based systems should not have to compensate displaced incumbent users of the spectrum, all incumbents arguably could be directly, adversely impacted by such a decision." AAR urges the Commission to affirm this reasoning in the instant proceeding. There is no need revisit the relocation issue on a proceeding by proceeding basis. What works in the 2 GHz band will work just as well in the 18 GHz band. In short, the relocation compensation policies adopted in the *Emerging Technologies* proceeding are well grounded in law and sound public policy, and should be extended here.

While AAR urges the Commission to simply adopt its existing relocation compensation rules to the extent that there is a need for any relocation, AAR also believes it necessary to reply to a number of the specific relocation recommendations made by Teledesic in its comments.

^{15/} Id First Report and Order at ¶ 24.

^{16/} In the Matter of Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service, ET Docket No. 95-18, Memorandum Opinion and Order, (FCC 98-309), (rel. November 25, 1998).

^{17/} Id at ¶ 16.

i. Teledesic's "sunset" proposal would absolve NGSO/FSS of any relocation responsibility.

In its comments, Teledesic recommends that FSS operators only be required to compensate incumbent FS operators for relocations that occur "before January 1, 2004." AAR has opposed the "sunsetting" of reimbursement rights under any circumstances, but the Teledesic proposal is particularly prejudicial to incumbent FS operators. Teledesic (and the other FSS operators) are unlikely to deploy their satellite systems before the end of 2003, which means that this "sunset" proposal would eliminate all FS incumbents from eligibility for relocation reimbursement. This is clearly the intent of the Teledesic proposal and it should be rejected by the Commission.

The establishment of a "sunset" date upon which relocation reimbursement rights expire drastically undermines the Commission's relocation compensation policies. The Commission has made the determination that new service providers who wish to assume the spectrum rights of incumbent system operators must compensate these incumbents for the costs of their relocation. This principle must be preserved irrespective of when such relocation takes place. Any other outcome fundamentally alters the balance of competing interests in favor of new services and against incumbent operators. This reality is magnified in the case of the 18 GHz band where it has been affirmatively established that sharing between the FS and FSS is technically impracticable. Simply put, incumbent FS operators currently operating on frequencies that become primary FSS allocations are going to have to be relocated. It makes

^{18/} Teledesic Comments at 14.

^{19/} See AAR Comments in WT Docket 95-157.

absolutely no sense from a practical or policy standpoint to allow FSS systems to simply wait out the expiration of some completely arbitrary "sunset" period so that they can therefore have unfettered access to spectrum without any obligation to reimburse the incumbents. In short, equity demands that the costs of a forced relocation be assumed by the party demanding the relocation irrespective of when the relocation takes place.

ii. Reimbursement of unamortized costs unfairly burdens incumbent FS operators.

Teledesic proposes that the Commission modify its relocation compensation policies by limiting the obligation of FSS relocators to payment of the unamortized value of the incumbent system.^{20/} This proposal flies in the face of the entire history of the Commission's relocation proceedings.

The objective of the Commission's relocation proceedings has been to provide for a seamless transition for relocated incumbents from their existing facilities to comparable alternative facilities. This process does not amount to any windfall for incumbent licensees, rather it ensures that they are not adversely impacted by the transition. They are simply made whole. This policy is long standing and has been affirmed by the Commission on numerous occasions.^{21/2}

^{20/} Teledesic Comments at 17.

^{21/} See First Report and Order and Third Notice of Proposed Rule Making, 7 FCC Rcd 6886, 6890 (1992), Second Report and Order, 8 FCC Rcd 6495 (1993); Third Report and Order and Memorandum Opinion and Order, 8 FCC Rcd 6589 (1993); First Report and Order, WT Docket No. 95-157, 11 FCC Rcd 8825; Memorandum Opinion and Order, ET Docket No. 95-18, (FCC 98-309).

In addition to being in direct contrast to longstanding Commission policy, the Teledesic proposal suffers from flawed factual assumptions. Teledesic argues that incumbents relocating to alternative spectrum will gain the benefit of new and improved systems that offer superior performance over the existing system, and that it would be inequitable to ask FSS systems to bear the cost of these upgrades. In reality, relocation often results in increased costs in order to maintain even comparable levels of performance. For example, 2 GHz systems relocated to 18 GHz will likely require the construction of entirely new facilities in order to achieve the same coverage. Where one FS link might cover a given distance in the 2 GHz band, it may require two or three links to cover the same distance at 18 GHz. The addition of multiple new links to a system may entail land acquisition, tower construction, and a host of other expenses associated with the deployment of new communications infrastructure. Teledesic would place the entire burden of these extraordinary relocation costs on incumbent FS operators. This is clearly inconsistent with the Commission's policies and should be rejected.

IV. Conclusion

The redesignation of the 18 GHz band, while necessary, will be a very difficult and complicated undertaking. However, it can be a success for all parties involved so long as it is conducted in an equitable and transparent manner. Accordingly, AAR urges the Commission to adopt the band redesignation proposal put forth by TIA, to preserve the grandfathering rights of incumbent FS operators, and to ensure that

relocated FS incumbents receive just compensation in accordance with the Commission's existing relocation policies.

Respectfully submitted,

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Date: December 21, 1998

CERTIFICATE OF SERVICE

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